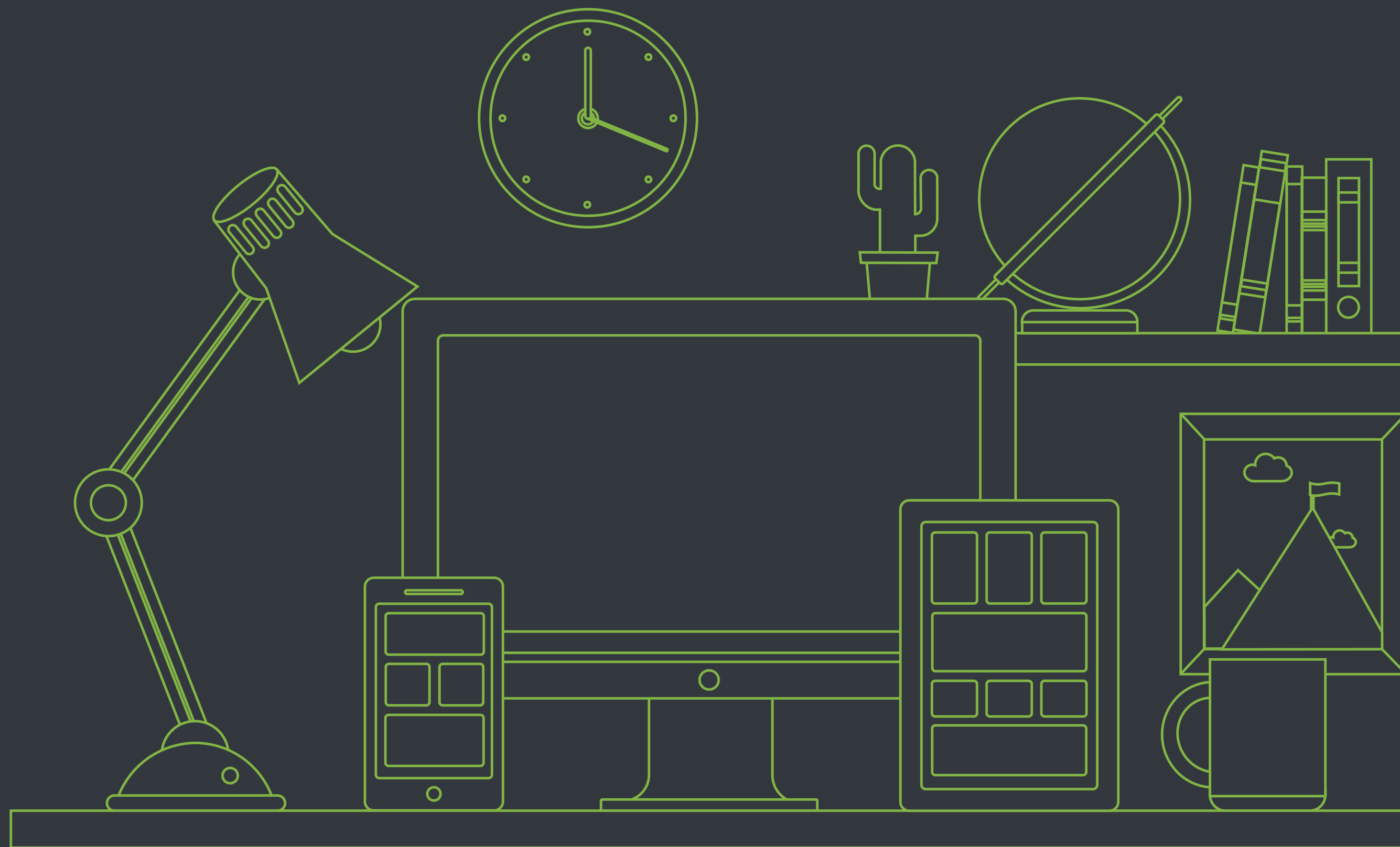


<https://aka.ms/codespaces-java>



CODESPACES

@rorypreddy



AGENDA

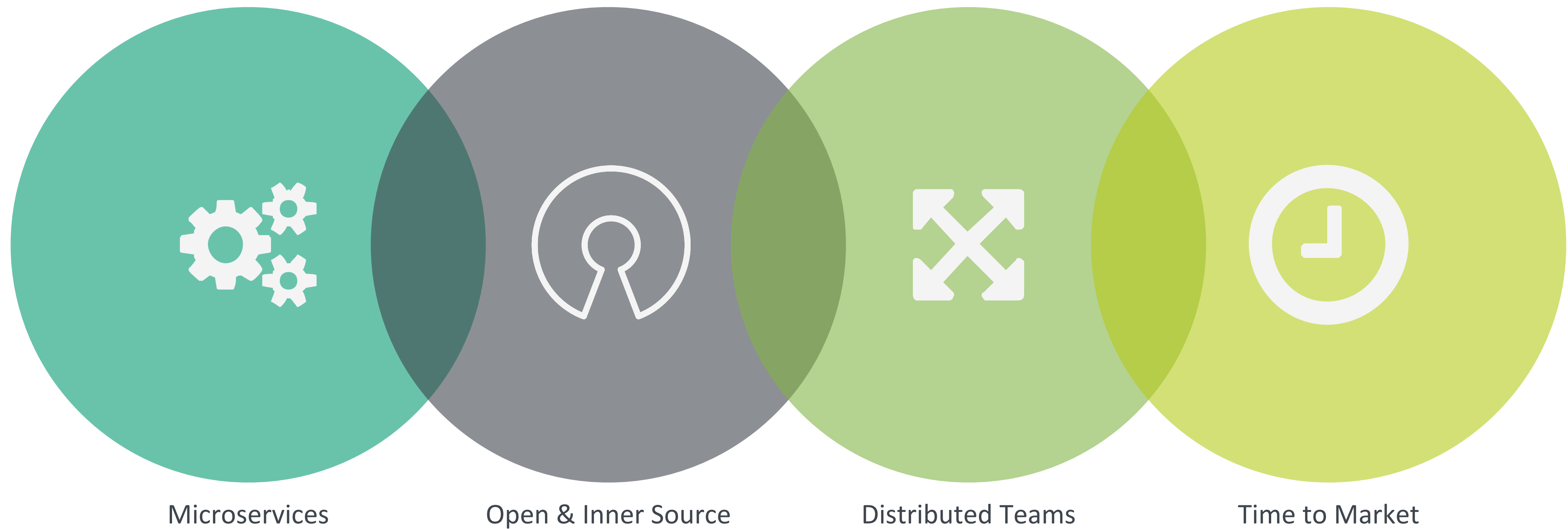
1. WHAT IS CODESPACES?

2. SECURITY

3. CONFIGURATION

4. Demo

TRENDS



WHAT IS A DEV ENVIRONMENT?



WHAT IS A DEV ENVIRONMENT?

Editor



WHAT IS A DEV ENVIRONMENT?



WHAT IS A DEV ENVIRONMENT?



WHAT IS A DEV ENVIRONMENT?



WHAT IS A DEV ENVIRONMENT?



WHAT IS A DEV ENVIRONMENT?



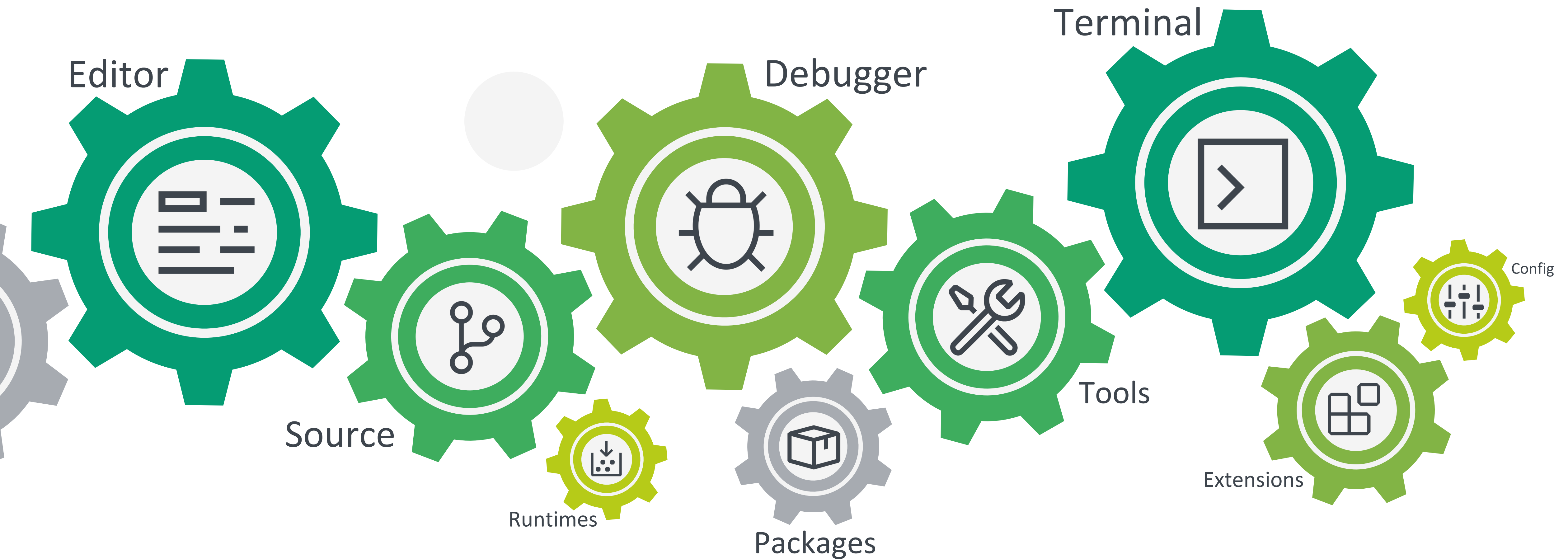
WHAT IS A DEV ENVIRONMENT?



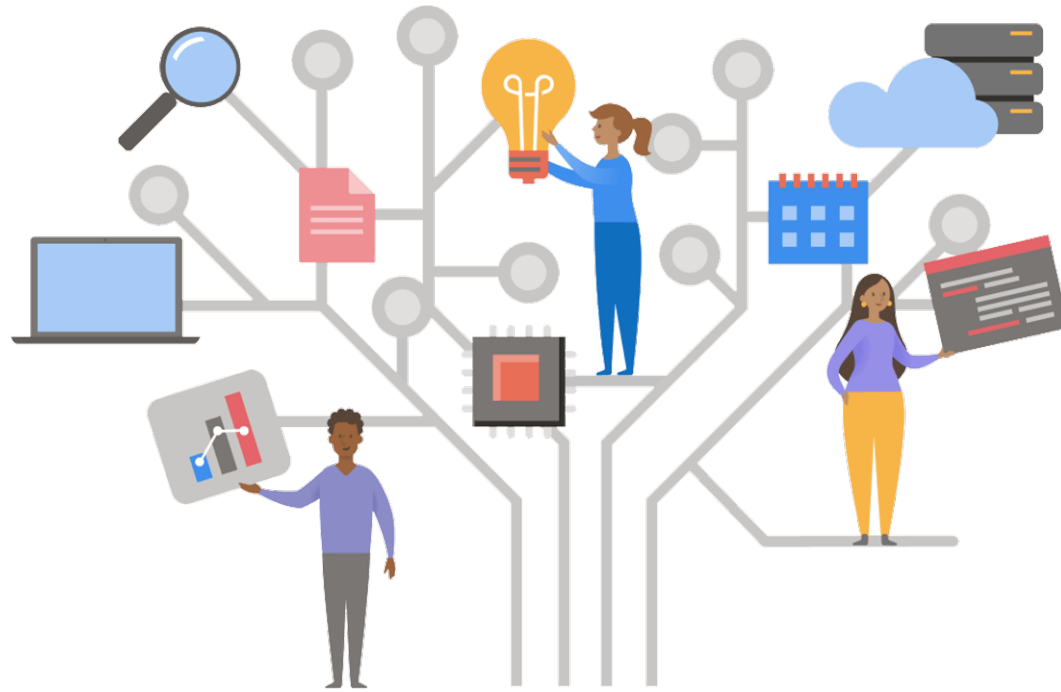
WHAT IS A DEV ENVIRONMENT?



WHAT IS A DEV ENVIRONMENT?



WHAT IS CODESPACES?



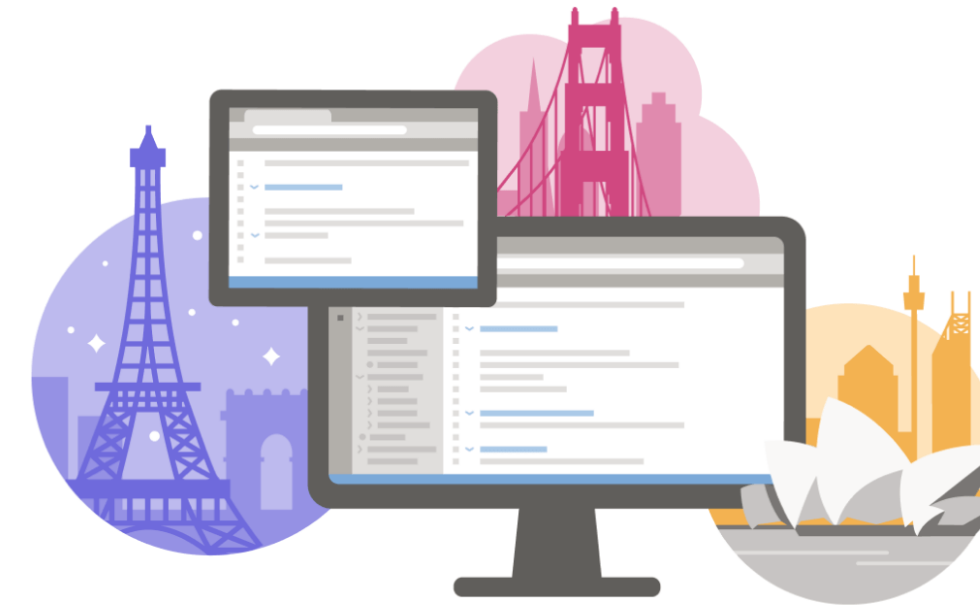
MANAGED ENVIRONMENTS FOR ANY PROJECT

Fully-managed, on-demand dev environments that dramatically reduce setup and maintenance



FEEL AT HOME EVEN WHEN AWAY

Environment requirements are auto-detected, but can be configured, and your settings, themes, Git identity are roamed so the experience looks and feels like local



DEVELOP FROM ANYWHERE

Connect from anywhere: Visual Studio Code, browser-based companion editor

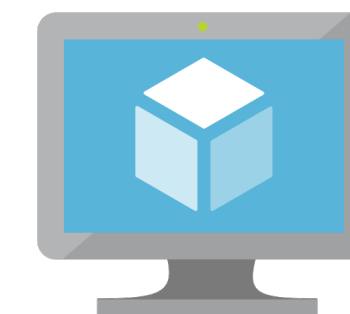
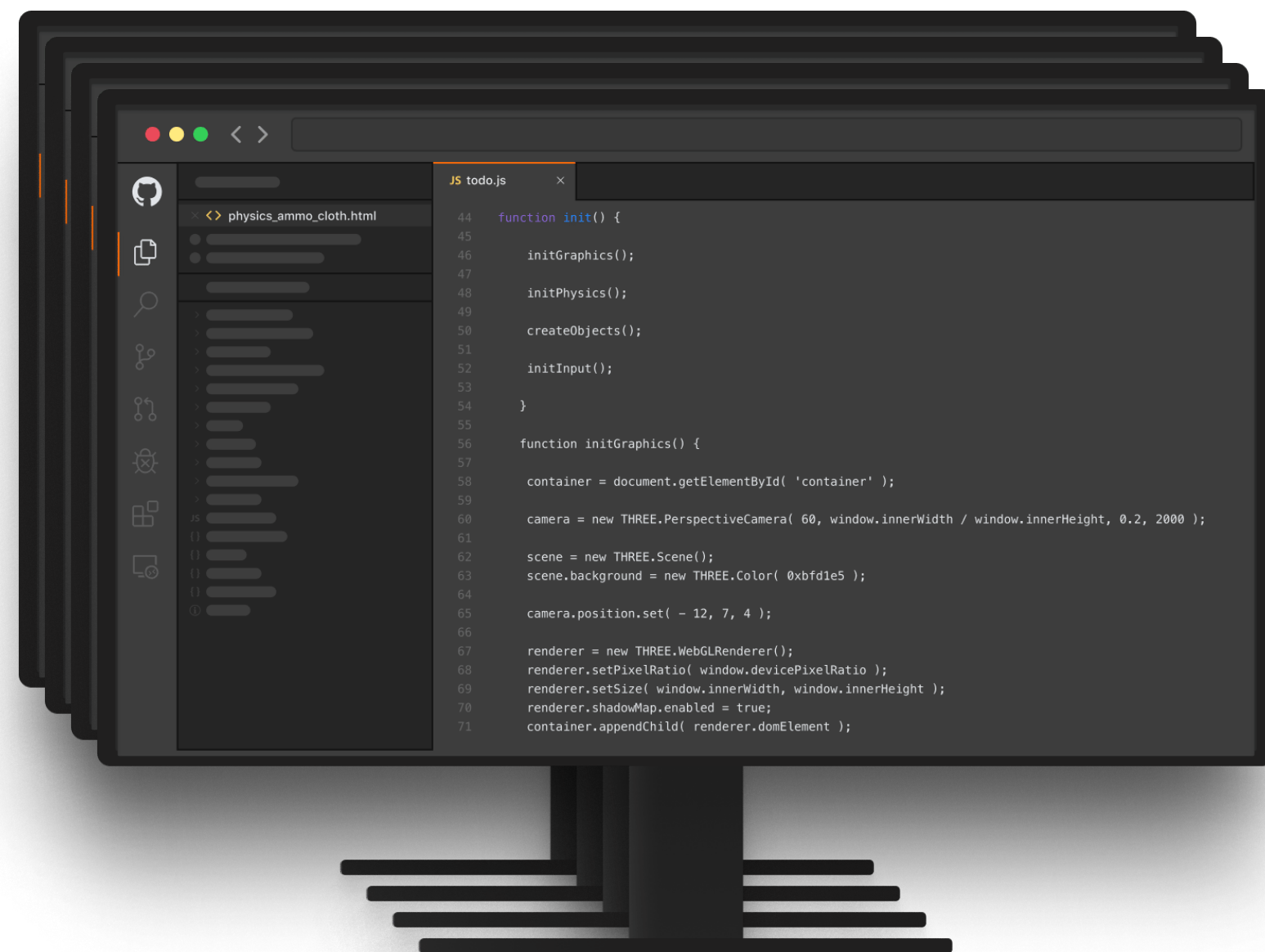


SUPERCHARGED COLLABORATIVE DEVELOPMENT

Fully collaborative environment, complete with AI-assisted development support

CODESPACES

CLOUD-HOSTED



Compute

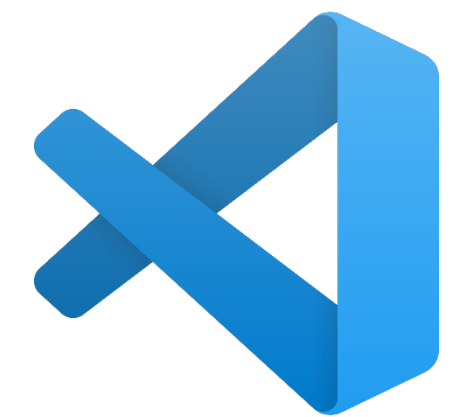


Network



Storage

EDITORS



COMPUTE

1

Cloud HOSTED

Environments are hosted in Cloud

2

VIRTUAL MACHINE ISOLATION

Each environment runs on a dedicated VM which is automatically suspended and deleted when not in use to reduce costs.

3

ENVIRONMENT CUSTOMIZATION

Environments run in containers based on our [default image](#), or [your own custom Dockerfile or image](#).

4

COMPOSED ENVIRONMENTS

Compose together complex development environments with [Docker Compose](#) support

1

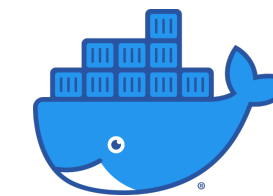
CLOUD

2

VIRTUAL MACHINE

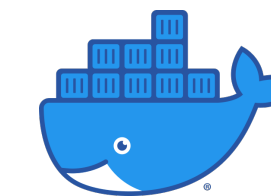
3

CONTAINER 1

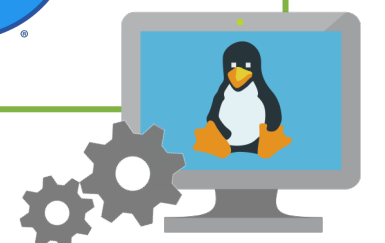
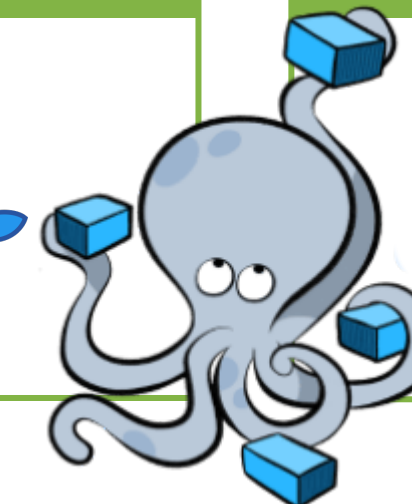
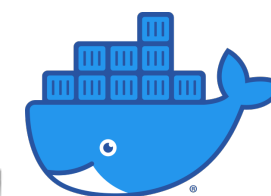


4

CONTAINER 2

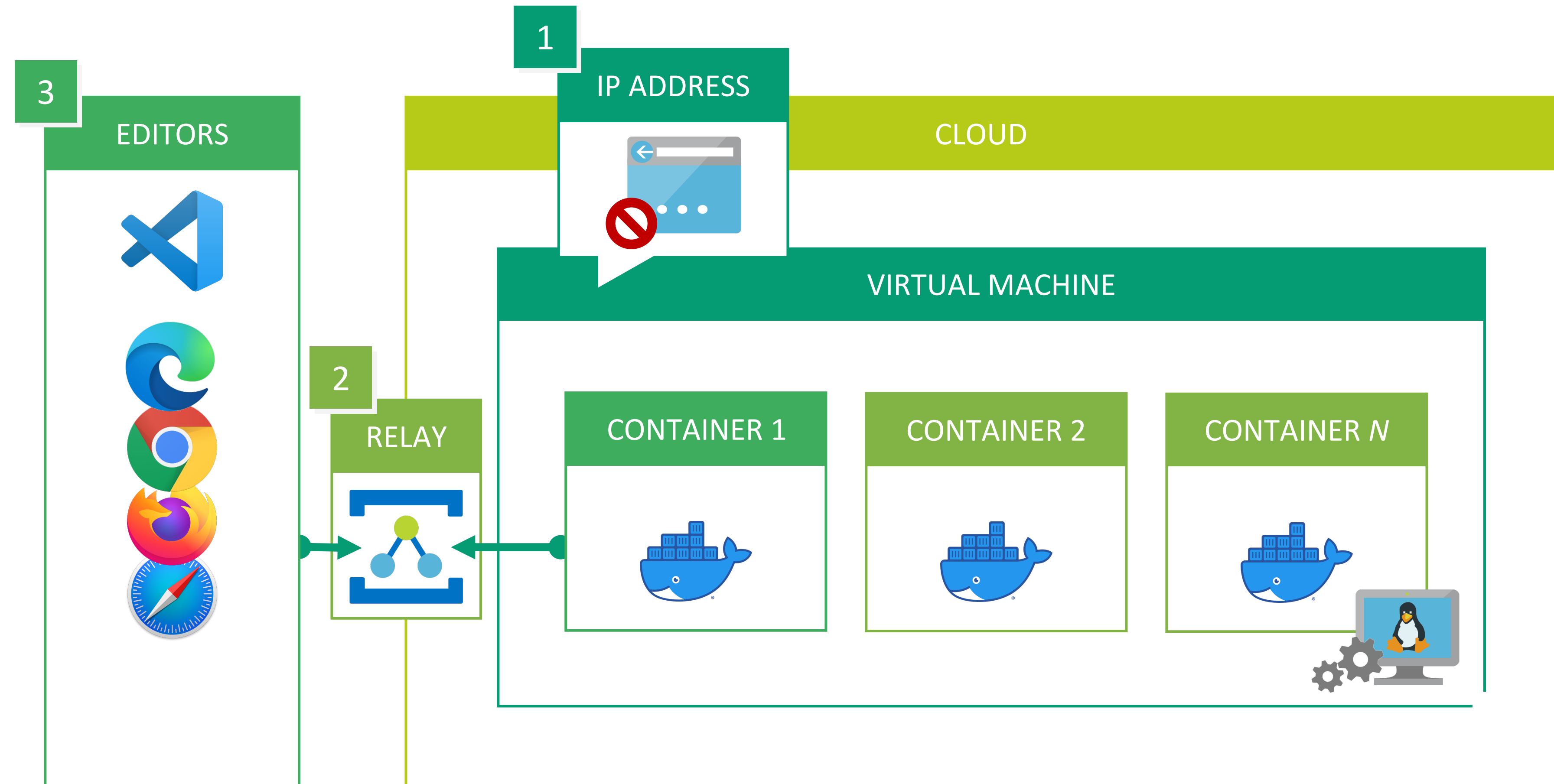


CONTAINER N



NETWORK

- 1 NO PUBLIC IP ADDRESS**
Environments are not addressable via a public IP.
- 2 NO INBOUND TRAFFIC**
Environments make outbound-only connections to relay and are:
 - End-to-end Encrypted
 - Authenticated
 - Authorized
- 3 CONNECTED CLIENTS**
Clients also leverage Relay to eliminate intrusive changes to firewall and network infrastructure.



STORAGE

1

SOURCE OF TRUTH

Codespaces leverages existing [Git](#) repositories as the source of truth.

2

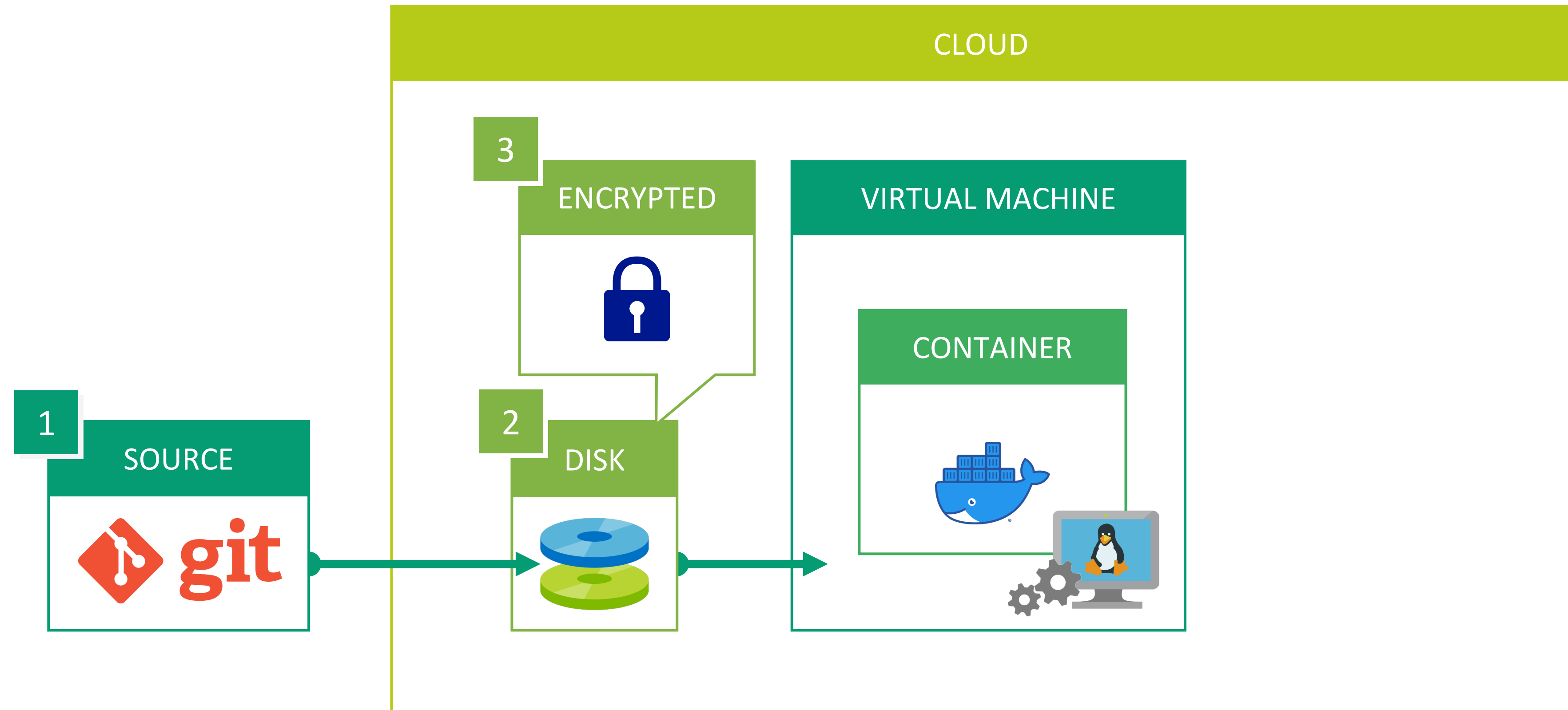
DEDICATED STORAGE

Each environment runs in its own dedicated and isolated storage account, which is mounted to the VM when active.

3

ENCRYPTED AT REST

Environment [storage is encrypted](#) with managed keys to protect data.



CONFIG

1

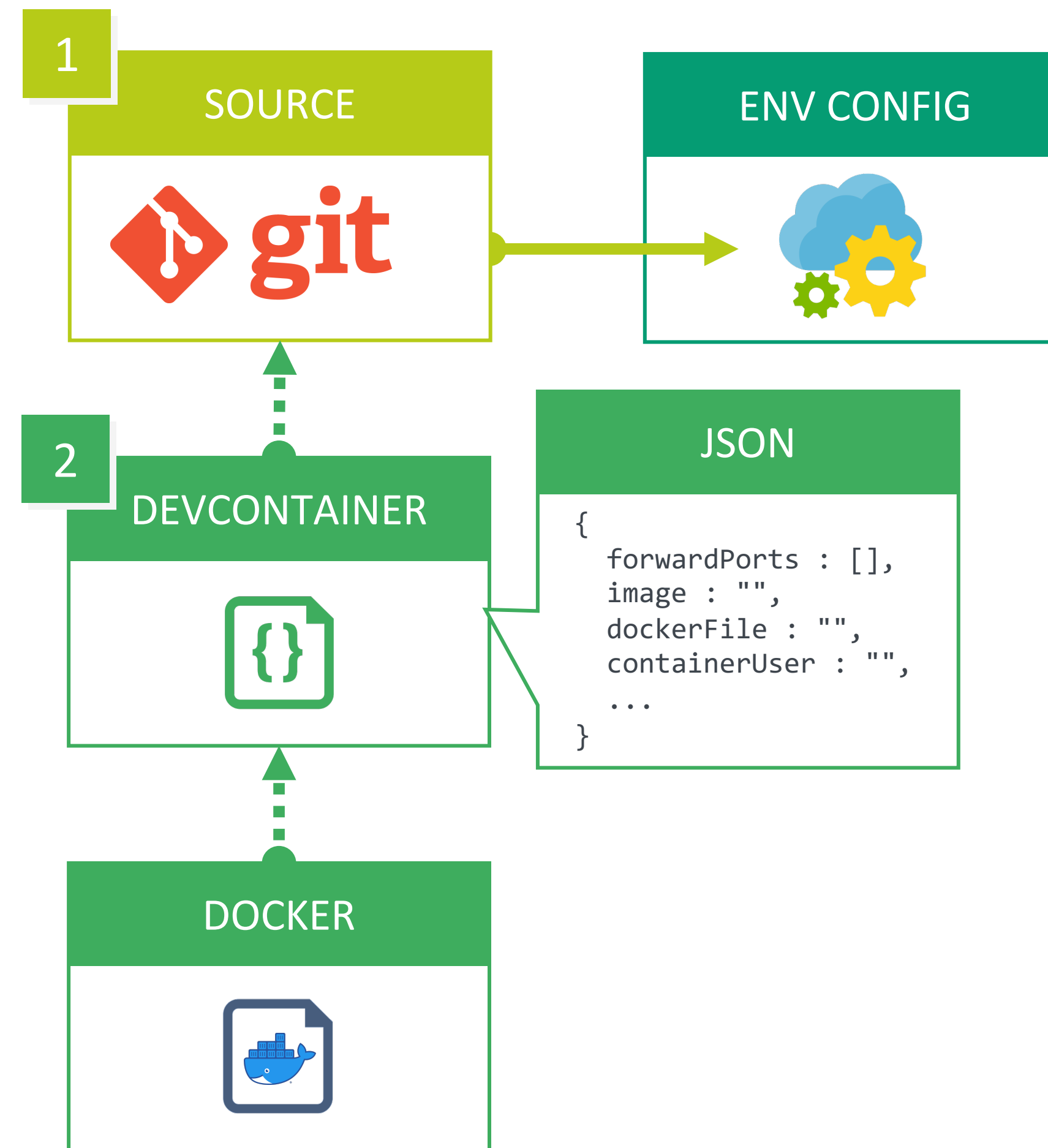
"GIT-OPS"

Configuration is versioned in Git. Git credentials are proxied from the client machine, not stored in the environment.

2

SECURE BY DEFAULT

[Configure devcontainer.json](#) to expose ports to client machine and customize environment container/user.



DEMO

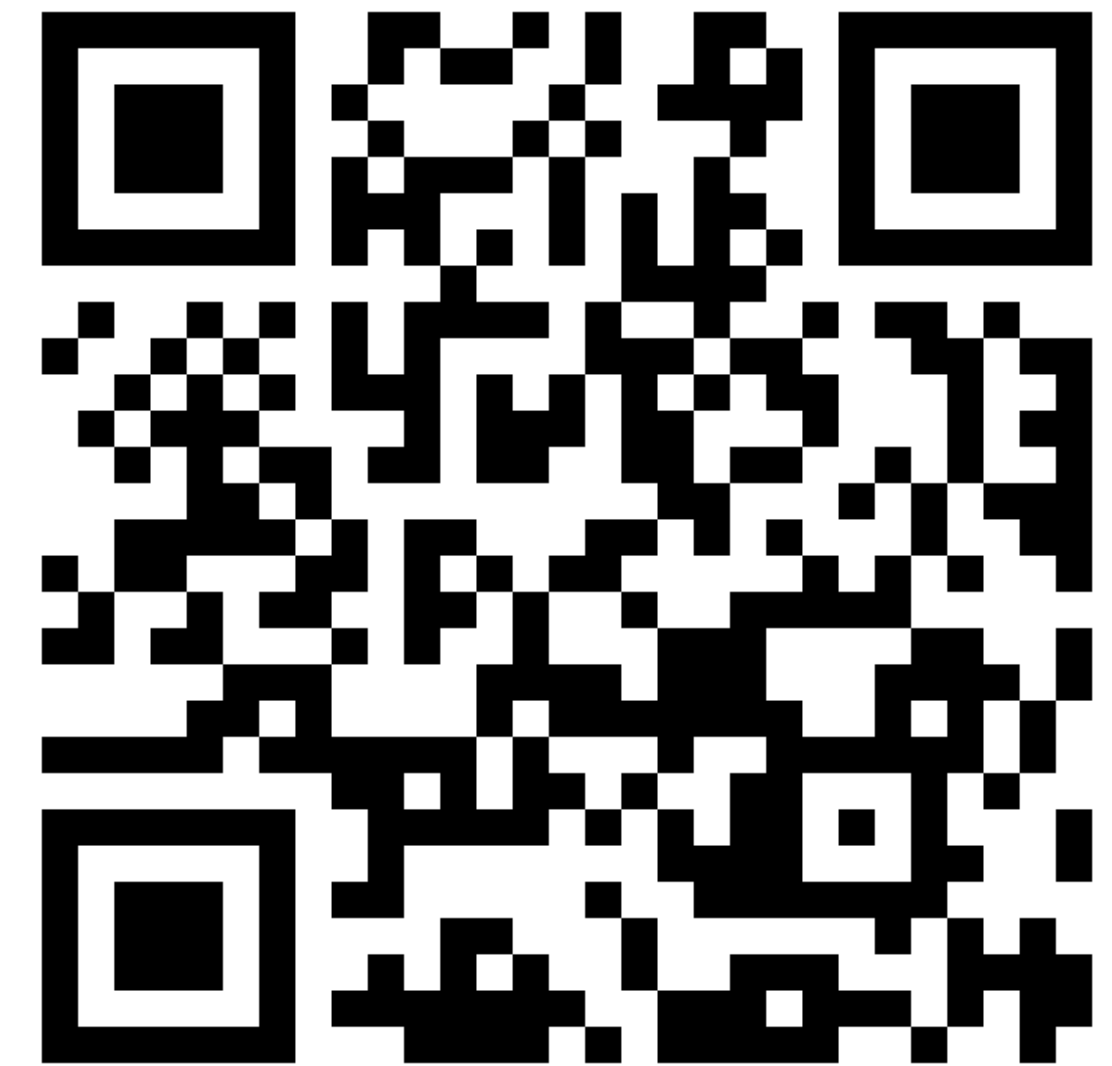


DEMO

1. SETUP
2. LOCAL ENVIRONMENT
3. DEVCONTAINER
4. CODESPACES

LEARN MORE

<https://aka.ms/codespaces-java>



@rorypreddy